CLAIMS

1. A management apparatus for managing license information indicating an amount of allowed usage of a program executable on a peripheral device or a function of the peripheral device, comprising

acquisition means for acquiring, from the outside, license identification information for identifying license information, and license information indicating an amount of a change in right of usage of the program;

management means for managing license identification information corresponding to license information that has already been installed;

determination means for determining whether license identification information corresponding to license information is included in license identification information managed by the management means; and

operation control means for, if the determination means determines that the license identification information corresponding to the license information is included in the license identification information managed by the management means, changing the value of the already-installed right of usage of the program by an amount equal to a

change in right of usage managed by the management means.

2. A management apparatus according to claim 1, wherein

the management apparatus manages expiration-date-of-installation information indicating a period during which the license information acquired by the acquisition means is valid; and

the management apparatus further comprises authentication means for authenticating the expiration date of installation of the license information.

3. A management apparatus according to claim 1, wherein the management means manages an encryption key of an already-installed program code together with program identification information for identifying the program.

4. A management apparatus according to claim 1, wherein

the license information is encrypted using an encryption key uniquely assigned to the peripheral device; and

the management apparatus further comprises decryption means for decrypting the encrypted license information.

5. A management apparatus according to claim 1, wherein if the amount of change in license information acquired by the acquisition means indicates an increment in right of usage, the operation control means increases the already-installed right of usage of the program by an amount equal to the increment in right of usage indicated by the license information, while, if the amount of change in license information acquired by the acquisition means indicates a decrement in right of usage, the operation control means reduces the already-installed right of usage of the program by an amount equal to the decrement in right of usage indicated by the license information.

6. A management apparatus according to claim 1, wherein

the management means manages the license information in the form of certification information; and

the license information in the form of certification information certifies the right of a particular amount of usage of a program installed on the peripheral device or a function of the peripheral device, and the license information in the form of certification information can be dealt with as valuable.

7. A management method for managing license information indicating an amount of allowed usage of a program executable on a peripheral device or a function of the peripheral device, comprising the steps of

acquiring, from the outside, license identification information for identifying license information, and license information indicating an amount of a change in right of usage of the program;

managing license identification information corresponding to license information that has already been installed;

determining whether license identification information corresponding to license information is included in license identification information managed in the management step; and

performing operation such that if it is determined in the determination step that the license identification information corresponding to the license information is included in the license identification information managed in the management step, changing the value of the already-installed right of usage of the program by an amount equal to a change in the right of usage of the program.

8. A management method according to claim 7, wherein

the management step includes the step of managing expiration-date-of-installation information indicating a period during which the license information acquired in the acquisition step is valid; and

the method further comprises the step of authenticating the expiration date of installation of the license information.

9. A management method according to claim 7, wherein the management step includes the step of managing an encryption key of an already-installed program code together with program identification information for identifying the program.

10. A management method according to claim 7, wherein

the license information is encrypted using an encryption key uniquely assigned to the peripheral device; and

the method further comprises the step of decrypting the encrypted license information.

11. A management method according to claim 7, wherein

in the operation step, if the amount of change in license information acquired in the acquisition step indicates an increment in right of usage, the already-installed right of usage of the program is

increased by an amount equal to the increment in right of usage indicated by the license information, while, if the amount of change in license information acquired in the acquisition step indicates a discernment in right of usage, the already-installed right of usage of the program is reduced by an amount equal to the decrement in right of usage indicated by the license information.

12. A management method according to claim 7, wherein the management step includes the step of dealing with the license information as valuable that certifies the right of a particular amount of usage of a program installed on the peripheral device or a function of the peripheral device.

13. A computer-readable storage medium including a control program stored thereon for being executed by a processor to manage license information indicating an amount of allowed usage of a program executable on a peripheral device or a function of the peripheral device, the control program comprising the steps of

acquiring, from the outside, license identification information for identifying license information, and license information indicating an amount of a change in right of usage of the program;

managing license identification information

corresponding to license information that has already been installed;

determining whether license identification information corresponding to license information is included in license identification information managed in the management step; and

performing operation such that if it is determined in the determination step that the license identification information corresponding to the license information is included in the license identification information managed in the management step, changing the value of the already-installed right of usage of the program by an amount equal to a change in the right of usage of the program managed by in the management step.

14. An information processing apparatus having a capability of producing license information indicating an amount of allowed usage of a program executable on a peripheral device or a function of the peripheral device, comprising

means for producing license identification information for identifying particular license information; and

change means for changing license information such that program identification information identifying the program, the amount of allowed usage,

and device identification information identifying a device are incorporated into the license information, and the license identification information produced by the generation means is incorporated into the license information.

15. An information processing apparatus according to claim 14, wherein the change means changes the license information such that an expiration date of installation of the license information is further incorporated into the license information.

16. An information processing apparatus according to claim 14, wherein the change means changes the license information such that the license information further includes an encryption key of a program code.

17. An information processing method for producing license information indicating an amount of allowed usage of a program executable on a peripheral device or a function of the peripheral device, comprising the steps of

producing license identification information for identifying particular license information; and

changing license information such that program identification information identifying the program, the amount of allowed usage, and device

identification information identifying a device are incorporated into the license information, and the license identification information produced in the production step is incorporated into the license information.

18. An information processing method according to claim 17, wherein in the change step, the license information is changed such that an expiration date of installation of the license information is further incorporated into the license information.

19. An information processing method according to claim 17, wherein the change step includes the step of changing the license information such that the license information further includes an encryption key of a program code.

20. A computer-readable storage medium including a control program stored thereon for being executed by a processor to produce license information indicating an allowed amount of usage of a program executable on a peripheral device or a function of the peripheral device, the control program comprising the steps of

producing license identification information for identifying particular license information; and

changing license information such that program identification information identifying the program,

the amount of allowed usage, and device identification information identifying a device are incorporated into the license information, and the license identification information produced in the production step is incorporated into the license information.

21. A peripheral device having a capability of managing the amount of usage of a program or a function by using a counter, comprising

acquisition means for acquiring the amount of allowed usage of a particular function provided by the peripheral device or the amount of allowed usage of a program on the peripheral device;

producing means for producing license information indicating an amount of allowed usage of a program executable on the peripheral device or a function of the peripheral device, on the basis of the amount of allowed usage acquired by the acquisition means;

detection means for detecting a device to which to transfer the license information; and

transfer means for transferring the license information to the device detected by the detection means.

22. A peripheral device according to claim 21, further comprising

means for producing unique license identification information for identifying license information; and

change means for changing the license information such that the license identification information produced by the generation means is incorporated into the license information.

23. A peripheral device according to claim 21, wherein the change means changes the license information such that the expiration date of the license information is incorporated as the license information into the license information.

24. A peripheral device according to claim 21, further comprising key acquisition means for acquiring an encryption key of a program, wherein the change means changes the license information such that the encryption key of the program code is incorporated into the license information.

25. A peripheral device according to claim 21, further comprising

means for acquiring a value indicating a right of usage of a program identified by program identification information, from the difference between a counter upper limit and a count value of a counter assigned to the program identification information;

encryption means for encrypting the acquired value and the program identification information into license information;

transmission means for transmitting, as license information, the license information encrypted by the encryption means to an external device; and

update means for updating the count value on the basis of the amount of right of usage corresponding to the transmitted license information.

26. An information processing method for controlling a peripheral device having a capability of managing the amount of usage of a program or a function by using a counter, comprising the steps of

acquiring the amount of allowed usage of a particular function provided by the peripheral device or the amount of allowed usage of a program on the peripheral device;

producing license information indicating an amount of allowed usage of a program executable on the peripheral device or a function of the peripheral device, on the basis of the amount of allowed usage acquired in the acquisition step;

detecting a device to which to transfer the license information; and

transferring the license information to the device detected in the detection step.

27. An information processing method according to claim 26, further comprising

producing unique license identification information for identifying license information; and

changing the license information such that the license identification information produced in the production step is incorporated into the license information.

28. An information processing method according to claim 26, wherein the change step changes the license information such that the expiration date of the license information is incorporated as the license information into the license information.

29. An information processing method according to claim 26, further comprising a key acquisition step of acquiring an encryption key of a program, wherein in the change step, the license information is changed such that the encryption key of the program code is incorporated into the license information.

30. An information processing method according to claim 26, further comprising

acquiring the amount of allowed usage of a particular program on the peripheral device;

producing license information on the basis of the amount of allowed usage acquired in the

acquisition step;

detecting a device to which to transfer the license information; and

transferring encrypted license information as license information to an external device.

31. A computer-readable storage medium including a control program stored thereon for being executed by a processor to control a peripheral device having a capability of managing the amount of usage of a program or a function by using a counter, the control program comprising the steps of

acquiring the amount of allowed usage of a particular function provided by the peripheral device or the amount of allowed usage of a program on the peripheral device;

producing license information indicating an amount of allowed usage of a program executable on the peripheral device or a function of the peripheral device, on the basis of the amount of allowed usage acquired in the acquisition step;

detecting a device to which to transfer the license information; and

transferring the license information to the device detected in the detection step.

32. A management apparatus for managing license information indicating an amount of allowed usage of

a program executable on a peripheral device or a function of the peripheral device, comprising

an acquisition device adapted to acquire, from the outside, license identification information for identifying license information, and license information indicating an amount of a change in right of usage of the program;

a management device adapted to manage license identification information corresponding to license information that has already been installed;

a determination device adapted to determine whether license identification information corresponding to license information is included in license identification information managed by the management device; and

an operation control device adapted to, if the determination device determines that the license identification information corresponding to the license information is included in the license identification information managed by the management device, change the value of the already-installed right of usage of the program by an amount equal to a change in right of usage managed by the management device.

33. A peripheral device having a capability of managing the amount of usage of a program or a

function by using a counter, comprising

an acquisition device adapted to acquire the amount of allowed usage of a particular function provided by the peripheral device or the amount of allowed usage of a program on the peripheral device;

a producing device adapted to produce license information indicating an amount of allowed usage of a program executable on the peripheral device or a function of the peripheral device, on the basis of the amount of allowed usage acquired by the acquisition device;

a detection device adapted to detect a device to which to transfer the license information; and

a transfer device adapted to transfer the license information to the device detected by the detection device.